

RHINOBATIDÆ.

53. *Rhinobatus productus* Ayres.

Very common.

GALEORHINIDÆ.

54. *Mustelus californicus* Gill.

Abundant. This species appears to be identical with the Atlantic *Mustelus canis*, itself indistinguishable from *Mustelus hinnulus* Blainville, of the Mediterranean.

55. *Triacis semifasciatus* Grd.

Not uncommon.

56. *Galeocerdo* sp?

The jaws of a large shark, with the teeth similar in both jaws, triangular, oblique, deeply notched on the outer margin, and all strongly serrate, are preserved by Mr. Pitcher, of San Diego. The shark was taken near San Diego, but south of the Mexican line. The width of the mouth is about a foot. I suppose this to have been a species of *Galeocerdo*.

HETERODONTIDÆ.

57. *Heterodontus francisci* (Grd.) Jor. & Gibb.

Common.

DESCRIPTION OF A NEW FLOUNDER (*XYSTREURYS LIOLEPIS*),
FROM SANTA CATILINA ISLAND, CALIFORNIA.

By DAVID S. JORDAN and CHARLES H. GILBERT.

XYSTREURYS LIOLEPIS, gen. et sp. nov.

GENERIC CHARACTERS.—Subfamily *Hippoglossinae*, allied to *Hippoglossina*, *Hippoglossoides*, and *Paralichthys* (*Pseudorhombus*). Eyes and color on the right side; mouth large, oblique, with the teeth developed on both sides, stout, unequal, bluntish, in a single series; gill-rakers few, short, thick, almost triangular; scales small, cycloid, membraneous, oblong in form; lateral line simple, arched over the pectorals; caudal fin double-truncate, the angles rounded; dorsal fin beginning over the eye; anal fin preceded by a feeble antrorse spine; ventrals lateral; body oblong, moderately deep, rather thin.

This genus differs from *Hippoglossoides* in the arched lateral line, and from *Hippoglossina* in the cycloid scales and in its dextral habit. From most of the related genera it is separated by the few stout short gill-rakers.

SPECIFIC CHARACTERS.—Form broadly elliptical, the profile continuous with the curve of the back; ventral outline from chin to past the ventrals nearly straight, the rest of the outline corresponding to the dorsal outline. Head moderate, shortish; mouth very oblique, not so large as in *Paralichthys maculosus*; the premaxillaries on the level of the pupil when the mouth is closed, the maxillary reaching to the posterior border of the eye; maxillary broad; teeth in a straight row, wide apart, unequal, conical, and blunt at tip, their number about $\frac{14+15}{13+12}$. Teeth in the lower jaw irregularly alternating large and small. In the upper jaw similar, but smaller and less obviously alternating. The middle tooth on the blind side in the upper jaw the largest.

Eyes large, close together, the lower slightly anterior; nostrils of right side above and in front of lower eye; upper nostrils turned over on the blind side; posterior nostrils largest, with a conspicuous flap. Interorbital space a narrow, elevated ridge, covered with very small scales; a few scales on the posterior part of the maxillary, none on the mandible.

Preopercle with its posterior margin free, little movable; cheeks and opercles densely covered with small, oblong, cycloid scales. Branchiostegals 7.

Gill-rakers short, blunt, triangular, scarcely one-fourth as long as the eye, their edges slightly dentate. There are about 7 of the large ones on the middle and lower part of the gill-arch, some rudiments above. (There are about 24 long and slender gill-rakers in *Paralichthys maculosus*.)

Lateral line without dorsal branch, with a broad curve above the pectorals. Scales quite small, oblong, cycloid, thin and membraneous; little imbricated except behind, and somewhat imbedded in the skin, with some smaller supernumerary scales, especially below; scales much smaller on the thoracic region than on the sides. Scales of right and left sides similar. A series of small scales extending up each ray of the vertical fins.

Lateral line with about 123 scales, pierced by tubes; number of rows of scales perhaps a little greater than the number of tubes.

Dorsal fin beginning just in advance of the middle of the pupil, its first ray slightly turned toward the blind side; some of the anterior rays pectinate; most of the rays simple; the fin rather low in front, gradually becoming higher to a point near the middle of the body, thence regularly diminishing behind, the last ray being near to the base of the caudal; the caudal peduncle very short; anal fin similar, its highest ray opposite the highest of the dorsal; a weak antrorse spine at beginning of anal; ventrals shortish, reaching past front of anal; pectoral of right side about as long as head, that of left side half as long. Caudal fin somewhat double-truncate, with rounded angles, the middle rays being produced.

Fin-rays: Dorsal, 82; anal, 64; ventrals, 7.

Measurements of typical specimen.

(No. ———, United States National Museum.)

Extreme length.....	11.50 inches.
Length to base of caudal fin.....	9.90 inches = 1.00
Greatest depth.....	.41
Least depth.....	.105
Length of caudal peduncle.....	.065
Length of head.....	.23
Width of interorbital area.....	.017
Length of snout.....	.04
Length of maxillary.....	.10
Length of mandible.....	.11
Diameter of orbit.....	.065
Distance from snout to dorsal.....	.075
Length of base of dorsal.....	.77
Greatest height of dorsal.....	.10
Distance of anal from snout.....	.32
Length of base of anal.....	.69
Height of longest ray.....	.11
Length of caudal.....	.13
Length of pectoral (right side).....	.24
Length of ventrals.....	.085

The typical example of this species was taken on a hook on the west side of the island of Santa Catalina, Los Angeles County, California.

DESCRIPTION OF A NEW RAY (*PLATYRHINA TRISERIATA*), FROM
THE COAST OF CALIFORNIA.

BY DAVID S. JORDAN AND CHARLES H. GILBERT.

PLATYRHINA TRISERIATA.

Disk broad-ovate, broader than long; the snout very bluntly rounded, not projecting; the angle formed anteriorly by the pectorals very obtuse; anterior margins of the pectorals slightly convex; tail stout, in form intermediate between *Raia* and *Rhinobatus*, its width at base about equal to the length of the snout and a little more than the interorbital width; tail much longer than the disk, not much depressed, its sides vertical, its lower lateral edges with broad horizontal fold, a slight groove above on each side of the median series of spines.

Dorsal fins similar, higher than long, the anterior far behind the end of the claspers; the posterior free margin of both fins very convex, not forming an angle. Caudal fin large, well developed both above and below, its outline entire, elliptical. Ventral fins with their margins entire, the claspers well developed. Pectoral fins extending forward to a point but little short of the tip of the snout.

Rostral ridges wide apart at base, rapidly convergent, inclosing a triangular area; a slight translucent space separates this from the opaque pectorals; eyes small, wide apart, the broad spiracles close behind them.